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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,640	08/28/2003	John R. Abe	ABE1P003	1675
28875	7590	01/26/2005	EXAMINER	
Zilka-Kotab, PC P.O. BOX 721120 SAN JOSE, CA 95172-1120			WOO, RICHARD SUKYOON	
			ART UNIT	PAPER NUMBER
			3629	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

 Office Action Summary	Application No. 10/652,640	Applicant(s) ABE, JOHN R.	
	Examiner Richard Woo	Art Unit 3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 15-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 15-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

- 1) Applicant's amendments filed November 23, 2004 has been entered.
- 2) Applicant's arguments with respect to claims 1 and 17-18 have been fully considered but they are not persuasive.

a) The applicant failed to overcome the rejections of Claims 1, 17 and 18 under 35 U.S.C. 112, 2nd paragraph although the applicant canceled claims 6-14 and incorporated into the Claims 1, 17 and 18. Not only the independent Claims still suffer from the original indefiniteness as presented in the previous office action, but also have new indefiniteness caused by the newly added subject matters from canceled claims 6-14.

For example, the subject matter from Claims 6 and 7 (non-optimized...) are no longer related to any other subsequent steps or pricing schemes. Accordingly, the subject matters from Claims 6-7 are non-descriptive material and render the claim indefinite because it is not clear how this limitation is utilized or correlated with other limitations to perform the operation. Similarly, the other subject matters from the Claims 8-14 never cure the prior 112 rejections of Claims 1, 17 and 18 as presented by the examiner in the previous office action and there is not significant correlation among each subject matter (e.g. "feedback is utilized ..." from the canceled Claim 14, so the feedback is utilized, but what happens after the feedback is utilized?). See Infra 112 rejection of Claims 1-5 and 15-37.

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b) Although the applicant amended the Claim 1 to include "utilizing a computer system", the claim must be rejected under 35 U.S.C. 101 again since the mere recitation of one technological device without any correlation with other method step(s) or system does not necessarily show that there is a significant change in the data or for performing calculation operation. For example, store result data in database ...; determine the optimal price by electronic manipulation to ...; causing a processor to compare results ..., and so forth.

c) Even though the applicant heavily amended the independent claims to overcome the prior art rejection, all claims are rejected as being anticipated by Delurgio et al.. First, each amended claim are even incomplete for omitting essential element(s) or step(s). No other method step(s) follows the first method step, simulating an optimal price, so as to further the applicant's invention. Accordingly, the whole method is reduced to one step notwithstanding numerous "wherein" paragraphs. The examiner invites the applicant's attention to published patents for reference how to construct the method claims.

d) In response to applicant's argument that the amended claim 17 intends to simulate the optimal price, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference

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as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

3) Applicant's arguments with respect to claims 22-28 and 32-37 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

4) Claims 1-5, 15-16, and 18-37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-5, 15-16, and 19-37 are simply directed to "a method". Other than utilizing the computer, there is no purpose and use for method. Furthermore, these claims do not recite any "useful" result under the State Street Bank & Trust analysis in that these claims are directed to only manipulating data in the abstract idea. Courts have found that the invention may be statutory subject matter if the invention as a whole produces a "**useful, concrete and tangible result.**" See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

The State Street court also found that statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374.

There is only one step and is directed to simulating an optimal price. The claimed step is not related to anything **useful** in the real world. What would the method invention intend to do after simulating the price?

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Additionally, there is no significant recitation of the technological arts in the Claim

1. Even if the applicant includes substantial recitation of the technological arts, employing a computer or data processing system to simulating prices do not render the steps any more "useful, tangible, and concrete" than if done by hand. In another words, just because abstract ideas are executed with the calculating computer or data processing system does not make the process any less abstract. Therefore, the claimed method claims are not directed to statutory subject matter because the invention as a whole does not produces a **"useful, concrete and tangible result."**

In Claim 18, the computer program product itself can not be directed to a practical application of the invention in the useful art to accomplish a concrete, useful, and tangible result. When the computer program is actually executed by the computer, the claimed subject matter produces a useful, concrete and tangible result. The recitation of "embodied on a computer readable medium" can not constitute the actual execution done by the computer system.

Claim Rejections - 35 USC § 112

5) Claims 1-5, 15-16, and 19-37 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: any data processing steps to perform the operations as claimed by the applicant.

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6) Claims 1-5 and 15-37 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 1, lines 4-7, it is not clear how “non-optimized prices” and its association with “non-optimized supplier” are further interrelated with other limitations in the claim to describe the invention.

In Claim 1, lines 4-39, it is not clear how these limitations (in wherein paragraphs) further describe the step of simulating an optimal price. They are directed to “non-functional descriptive material” and would not be considered for limitations because they cannot exhibit any functional interrelationship with the way in which computing processes are performed. See MPEP 2106 IV B1(b).

In Claim 1, lines 8-12, it is not clear how the price can be generated by simply “receiving”. What mathematical model or pricing scheme has been utilized to generate the optimized price.

In Claim 1, line 18, the claim is silent how the price is determined.

Claims 17 and 18 contains the identical indefiniteness as cited above.

In Claim 31, choosing the number of randomly selected prices renders the claim indefinite (it is not clear how this claim further limit the Claim 1).

Claim Rejections - 35 USC § 102

7) Claims 1-5 and 15-21, 29-31, as long as they are definite, are rejected under 35 U.S.C. 102(e) as being anticipated by Delurgio et al. (US 6,553,352).

As for Claim 1, Delurgio et al. discloses a method comprising:

simulating an optimal price;

wherein the optimal price is generated by receiving a plurality of prices associated with a price-frequency mathematical distribution, a member of competitors, a business objective, and a cost associated with a good or service (see col. 3, lines 37-64; col. 8, lines 41-45, lines 55-64; col. 9, lines 41-44;);

wherein the business objective is selected from the group consisting of maximizing revenue for a good or service, maximizing gross profit for the good or service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before income tax (EBIT) for the good or service (see Supra columns for maximizing gross profit or revenue);

wherein the optimal price is compared with the prices of at least one of competitors and results of each comparison is stored in the database (see col. 1, line 29 – col. 3, line 18; Claims); and

wherein the optimal price is updated.

As for Claim 2, Delurgio et al. further discloses the method including receiving a plurality of sets of one or more prices (see Supra columns).

As for Claim 3, Delurgio et al. further discloses the method, wherein the sets of one or more prices are customizable (see Id.).

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As for Claim 4, Delurgio et al. further discloses the method including comparing the sets of one or more prices (see *Id.*).

As for Claim 5, Delurgio et al. further discloses the method including reporting on the comparison (see *Supra* columns).

As for Claim 15, Delurgio et al. further discloses the method, wherein the method is performed by a plurality of components including a frequency distribution engine, a probability of win engine, an expected results engine, an optimization update engine, a bid engine, a market place engine, and a financial accumulator engine (see Fig. 3 for the various tools or engines).

As for Claim 16, Delurgio et al. further discloses the method, wherein the method is performed by a plurality of components selected from the group consisting of a frequency distribution engine, a probability of win engine, an expected results engine, an optimization update engine, a bid engine, a market place engine, and a financial accumulator engine (see *Id.*).

As for Claim 19, Delurgio et al. further discloses the method, wherein a GUI is included (see Figs. 6-38 for example).

As for Claim 20, Delurgio et al. further discloses the method, wherein GUI is used for input.

As for Claim 21, Delurgio et al. further discloses the method, wherein GUI is used for any kind of input.

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As for Claim 29, Delurgio et al. further discloses the method, wherein a maximum revenue value and a maximum profit value are identified along with corresponding prices (see Fig. 20).

As for Claim 30, Delurgio et al. further discloses the method, wherein a probability of a customer purchase is determined for the optimal price (estimated product demand in Supra columns).

As for Claim 17, Delurgio et al. discloses an optimal price simulator system comprising:

a plurality of components selected from the group consisting of a frequency distribution engine, a probability of win engine, an expected results engine, an optimization update engine, a bid engine, a market place engine, and a financial accumulator engine (see Fig. 3 and the descriptions thereof);

wherein the optimal price is generated by receiving a plurality of prices associated with a price-frequency mathematical distribution, a member of competitors, a business objective, and a cost associated with a good or service (see col. 3, lines 37-64; col. 8, lines 41-45, lines 55-64; col. 9, lines 41-44;);

wherein the business objective is selected from the group consisting of maximizing revenue for a good or service, maximizing gross profit for the good or service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before income tax (EBIT) for the good or service (see Supra columns for maximizing gross profit or revenue);

wherein the optimal price is compared with the prices of alt least one of competitors and results of each comparison is stored in the database (see col. 1, line 29 – col. 3, line 18; Claims); and
wherein the optimal price is updated.

As for Claim 18, Delurgio et al. discloses a computer program product for optimizing an optimal price comprising:

computer code for optimizing and simulating an optimal price;
wherein the optimal price is generated by receiving a plurality of prices associated with a price-frequency mathematical distribution, a member of competitors, a business objective, and a cost associated with a good or service (see col. 3, lines 37-64; col. 8, lines 41-45, lines 55-64; col. 9, lines 41-44;);

wherein the business objective is selected from the group consisting of maximizing revenue for a good or service, maximizing gross profit for the good or service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before income tax (EBIT) for the good or service (see Supra columns for maximizing gross profit or revenue);

wherein the optimal price is compared with the prices of alt least one of competitors and results of each comparison is stored in the database (see col. 1, line 29 – col. 3, line 18; Claims); and
wherein the optimal price is updated.

Claim Rejections - 35 USC § 103

8) Claims 22-28 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delurgio et al..

Delurgio et al. discloses the invention as recited above but does not expressly claim limitations in Claims 22-28 and 32-36.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify Delurgio to utilize the price-frequency mathematical distribution; identify the lowest price as a winning bid along with a corresponding supplier; add the winning bid and the probability of a customer purchase to an actual results table; calculate the value for competition by summing each event of randomly selecting a set of prices corresponding to the number of competitors; calculate the value representing a sum of wins corresponding to the supplier; and calculate the actual win-rate by dividing the sum of wins by the value for competition because Applicant has not disclosed that utilizing mathematical distribution and win-rate provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the optimization engine of Delurgio et al. because it would provide a superior technique for configuring optimization prices of products for sale.

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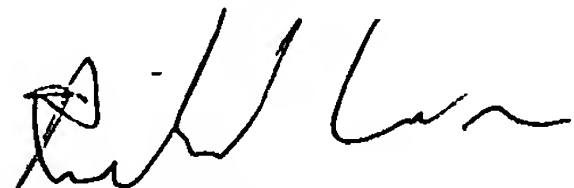
Therefore, it would have been an obvious matter of design choice to modify Delurgio et al. to obtain the invention as specified in claims.

Conclusion

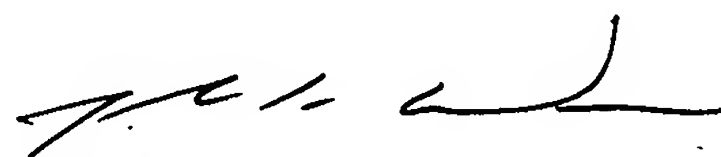
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Woo whose telephone number is 703-308-7830. The examiner can normally be reached on Monday-Friday from 8:30 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 703-308-2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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January 20, 2005



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